Tue Feb 16 13:52:22 EST 2016
Leavy.Jacqueline@epamail.epa.gov
FW: PFOA Drinking Water Contamination Issues
To: CMS.OEX@epamail.epa.gov

From: Bilott, Robert A. [mailto:bilott@taftlaw.com]
Sent: Tuesday, February 16, 2016 12:35 PM
To: Mccarthy, Gina <McCarthy.Gina@epa.gov>
Subject: PFOA Drinking Water Contamination Issues

Please see attached. Thank you.

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February 16, 2016

BY EMAIL AND REGULAR U.S. MAIL

Gina McCarthy
Administrator
United States Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Ave., N.W.
Mail Code 1101A
Washington, D.C. 20460

Re: PFOA Drinking Water Contamination

Dear Administrator McCarthy:

As indicated in the attached examples of our prior correspondence to EPA, including our letters of November 9, 2015, and January 20, 2015, to EPA Regions III and V (extra copies attached), we have been writing to EPA since March of 2001 – for almost *fifteen years* – to try to focus the Agency's attention on the imminent and substantial threat to human health and the environment posed by the contamination of human drinking water supplies with perfluorooctanoic acid ("PFOA" a/k/a "C-8").[1] In our letter of November 9, 2015, we specifically highlighted the fact that recent testing of public water supplies across the country indicated the presence of PFOA in numerous locations at levels exceeding the level of PFOA (0.05 ppb) where six serious diseases, including cancer, were found by independent scientists to be linked to PFOA exposures in community residents. (*See* attached. *See also* www.c8sciencepanel.org .) In response, EPA indicated in a letter dated December 8, 2015, that it was working on a guideline for "lifetime" exposures to PFOA in drinking water, which it expected to be able to release sometime "by early 2016." (*See* attached.)

On January 28, 2016, EPA noted that it was still working on "developing a lifetime health advisory level for PFOA," but that,"[w]hile this work continues," EPA

[1] We also recently have communicated with EPA Region IV to try to obtain EPA's assistance in investigating and addressing significantly elevated PFOA blood levels among Northern Kentucky residents, (*see* attached), but, so far, EPA has still not responded.

"recommends" that water containing more than 0.1 ppb PFOA not be used for drinking or cooking and that those with such PFOA-contaminated water sources use bottled water. (*See* attached.) Thus, at a minimum, it appears that EPA has revised its guideline for short-term, temporary exposures to PFOA in drinking water from 0.4 ppb to 0.1 ppb. What is not clear, however, is the extent to which members of the public exposed to levels of PFOA exceeding 0.1 ppb in different areas across the country (particularly those with long-term, "lifetime" exposures) have been informed of those exposures or have seen the EPA's recommendation to use bottled water or some other alternative water source in those situations.

In contrast to the public, EPA is aware of several such exposure scenarios by virtue of the data supplied to EPA by various public water supplies under EPA's unregulated contaminant monitoring program ("UCMR program"). Under the UCMR program, certain public water supplies have been sampling for and reporting to EPA the presence of PFOA in their drinking water since at least 2013, but not all of those water supplies have necessarily informed their customers of the detections of PFOA, believing that, because the chemical is not one of the "regulated" water contaminants for testing, the chemical is not "required" to be included on the annual customer water reports. We have attached a list of what we believe to be the currently-available public water supply sampling results for PFOA available in the large file of raw data posted to EPA's UCMR program webpage.[2]

As noted in our prior correspondence, we request that EPA take those steps necessary to immediately and properly disclose, investigate, and address elevated levels of PFOA in impacted communities, whether reflected in elevated drinking water exposures or elevated blood levels. At a minimum, such steps should include an immediate revision to EPA's March 2009 Consent Order with DuPont to incorporate EPA's latest 0.1 ppb guideline for PFOA in drinking water, given recent detections of PFOA above that level in at least one impacted local community - Vienna, West Virginia – as we requested in our January 29, 2016, email to EPA . (*See* attached.)

Thank you.

Very truly yours,

Robert A. Bilott

RAB:mdm
Attchs.

[2] We understand that EPA is only currently requiring the reporting of PFOA at concentrations at or above 0.02 ppb (even though current analytical methods allow quantification and detection at much lower levels), so this list does not include any detection below that arbitrary 0.02 ppb reporting level.

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January 20, 2015

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Randy C. Huffman
Cabinet Secretary
West Virginia Department of Environmental Protection
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Re: *In the Matter of: E.I. du Pont de Nemours and Company*
(Docket Nos. SDWA-03-2009-0127 DS – SDWA-05-2009-0001)

Dear Ms. Hedman, Mr. Garvin and Mr. Huffman:

We first wrote to US EPA and WVDEP in March of 2001 – over 13 years ago – to alert your Agencies to the imminent and substantial threat to human health and the environment posed by the contamination of human drinking water supplies with perfluorooctanoic acid ("PFOA" a/k/a "C-8") released from E. I. du Pont de Nemours and Company's ("DuPont's) Washington Works Plant in Wood County, West Virginia (the "DuPont Plant"). (*See* Ex. A.) In that original letter, we alerted your Agencies to the fact that PFOA was poisoning drinking water supplies in the vicinity of the DuPont Plant at levels exceeding a 1 part per billion (1 ppb) exposure guideline that DuPont had adopted for PFOA in community water more than a decade earlier, and asked your

Agencies to take immediate action to address and abate that health threat under applicable state and federal laws, including the Clean Water Act ("CWA"), the Safe Drinking Water Act ("SDWA"), the Toxic Substances Control Act ("TSCA"), and the Resource Conservation and Recovery Act ("RCRA"). (*See id.*) Soon thereafter, US EPA launched a "priority review" of PFOA under TSCA and began the process to establish federal safety limits for PFOA in drinking water, beginning with the release of a draft PFOA risk assessment in 2003. WVDEP, on the other hand, has still not even begun the process of trying to establish or set any regulatory safety levels for PFOA, choosing, instead, to defer to whatever US EPA ultimately decides. In the meantime, given the lack of any enforceable federal or state regulatory safety limits for PFOA in drinking water, US EPA was left with having to address this serious health threat by negotiating "Consent Orders" with DuPont through which US EPA could incorporate only such terms as to which DuPont ultimately would "consent."

The first such US EPA Consent Order was entered in 2002, soon after US EPA received our original letter. Rather than require clean water whenever DuPont's own 1 ppb drinking water exposure level was exceeded (which 1 ppb level had been created by DuPont's own scientists, had been followed internally by DuPont for more than a decade, and was still being followed internally by DuPont at that time), DuPont would only "consent" to providing clean water through this new Consent Order, if the level of PFOA exceeded a significantly higher 14 ppb level that DuPont's outside consultants had generated.

Just two months later, in May 2002, DuPont succeeded in forcing US EPA to raise that 14 ppb level to 150 ppb, based on the terms of a separate, privately-negotiated deal between DuPont and WVDEP under which WVDEP allowed DuPont to collaborate with WVDEP and its consultant to create a new, higher trigger level for clean water. DuPont then held that 150 ppb number out to the public for the next several years as the appropriate, government-endorsed safety number for PFOA in drinking water, even though, internally, DuPont's own scientists still supported a 1 ppb exposure guideline for PFOA in community drinking water supplies.

DuPont only "consented" to a new Consent Order with US EPA on these issues in 2006, after significant additional health risk information had been released on PFOA, including a final report from US EPA's own Science Advisory Board, where the majority of the Board recommended that PFOA be classified as a "likely" human carcinogen. Upon review of this new data, US EPA's scientists had determined that the 150 ppb trigger picked by DuPont and WVDEP was "not protective of human health and must be replaced by a lower threshold value of 0.20 ppb." (Ex. B. at 1.) DuPont informed US EPA at the time that it agreed, based on this new data, that "it is prudent to minimize, where possible, exposure to biopersistent materials such as PFOA," and that a new, lower clean water trigger number should be adopted "to help promote reductions of PFOA in blood levels through alternate drinking supplies." (Ex. C at 3-4.) According to DuPont, a "median serum/drinking water ratio for PFOA was calculated to be 105, i.e.,

for every 1 ppb of PFOA in drinking water ingested by community residents; 105 ppb of PFOA will be present in serum." (*Id.* at 9.) At the 150 ppb trigger level then in effect, DuPont noted that "a serum level of approximately 15 ppm [15,000 ppb] can be predicted," which "exceeds the current occupational exposures" where adverse health effects were being reported in the new data. (*Id.* at 11.) According to DuPont, reducing the clean water trigger from 150 ppb to 0.5 ppb - not 0.20 ppb – would be sufficient, as it "would result in approximately 50 ppb of PFOA in serum," which DuPont argued was "within the range found in the general population" where no such adverse health effects were purportedly being found at the time. (*Id.*) Thus, in light of DuPont's refusal to agree to a safe drinking water trigger level any lower than 0.5 ppb at that time, the new US EPA/DuPont Consent Order in 2006 lowered the PFOA clean drinking water threshold from 150 ppb to 0.5 ppb PFOA. US EPA was not able to obtain DuPont's "consent" to lower the threshold for safe water any further until 2009, after US EPA released its first "provisional health advisory" ("PHA") for short-term, temporary exposure to C-8 in drinking water of 0.4 ppb. At that point, DuPont finally agreed to lower the clean water trigger in its Consent Order with US EPA - but only from 0.5 ppb to 0.4 ppb.

US EPA made clear in its 2009 Consent Order with DuPont that the 0.4 ppb C-8 trigger level for clean water was a "temporary value that will be re-evaluated when EPA determines a reference dose under TSCA or establishes a drinking water standard for C-8, whichever comes first." (2009 Consent Order, at ¶ 46.) US EPA also made clear that it reserved "the right to modify the [0.4 ppb C-8 clean water trigger] identified in this Order if information previously unknown to EPA is received and EPA determines that this previously unknown information, together with any other relevant information, indicates that [such trigger level] may not be protective of human health." (*Id.* at ¶ 47.)

Since entry of the current Consent Order in March of 2009, extensive additional information has been released in the scientific and peer-reviewed literature confirming that the 0.4 ppb trigger level for clean water is not protective of human health for long-term exposures and should be revised. For example, in December 2009, US EPA released its Long-Chain Perfluorinated Chemicals (PFCs) Action Plan, identifying C-8 as "raising serious health and environmental concerns," which could justify significant "risk reduction measures to protect human health and the environment." Then, in 2011-2012, an independent C-8 Science Panel – jointly selected and fully-funded by DuPont – confirmed probable links between exposure to PFOA in drinking water as low as 0.05 ppb and six serious human diseases: 1) kidney cancer; 2) testicular cancer; 3) ulcerative colitis; 4) thyroid disease; 5) pregnancy-induced hypertension/preeclampsia; and 6) hypercholesterolemia. Each of those links was based on the independent Science Panel's review of data (including PFOA blood tests, blood chemistries, and medical records reviews/verifications) from approximately 70,000 people actually exposed to PFOA in drinking water in the vicinity of the DuPont Plant, along with all other available data, including peer-reviewed studies from all over the world and DuPont's own worker data. Each of the Science Panel's findings ultimately was

confirmed in published, peer-reviewed papers. US EPA was encouraged through public comments and formal peer reviewers to consider and incorporate all such important new data (along with additional, significant new toxicological data, including new data on mammary gland impacts and from studies in mice), in the context of finalizing US EPA's "Health Effects Document for Perfluorooctanoic Acid," which was released in draft form to the public in 2014 but, as of today's date, still has not been finalized.

Although US EPA still has not released a guideline for long-term, chronic exposure to PFOA in drinking water or finalized its PFOA health effects document, European regulators have moved forward. Just this month, the European Chemicals Agency (ECHA) publicly released a report from Germany and Norway recommending significant new restrictions on PFOA in light of the more current health effects data, specifically including the findings of the C8 Science Panel linking very low level PFOA exposure in drinking water (as low as 0.05 ppb) with 6 diseases, including two forms of cancer. (*See* http://echa.europa.eu/documents/10162/e9cddec6-3164-473d-b590-8f9caa50e7 .) Particularly significant in this new European report are new risk calculations revealing that levels of PFOA in the blood of people exposed to PFOA at the levels allowed under the existing 2009 Consent Order (PFOA drinking water levels as high as 0.5 ppb) would far exceed the blood risk levels derived using the latest health effects data. This is because significant adverse health effects (including cancer) were found to be linked to PFOA exposures in humans as low as 0.05 ppb in drinking water – some *ten times lower* than the current level allowed under the 2009 Consent Order. (*See also* Post, G.B., *et al.*, "Perfluorooctanoic acid (PFOA), an emerging drinking water contaminant: A critical review of recent literature," 116 *Environ. Res.* 93-117 (July 2012).)

Although neither the European report nor US EPA's work to set a safety level for long-term chronic exposure to PFOA in drinking water has been completed, US EPA retains both the right and responsibility to modify the 2009 Consent Order in light of new health data on PFOA to make sure that human health is protected. US EPA should consider the new PFOA health effects data and European safety calculations noted above to evaluate whether there is a current or imminent and substantial threat or endangerment to human health that mandates steps be taken to modify the 2009 Consent Order to require DuPont to provide for alternate/clean drinking water for any human drinking water supply in the vicinity of the DuPont Washington Works Plant where PFOA has been detected at levels below the current 0.4 ppb trigger level established in that Consent Order. In New Jersey, for example, state regulators already are evaluating the safety of drinking water supplies by comparing PFOA water levels to a 0.04 ppb "health-based drinking water guidance level" developed specifically for the purpose of assessing long-term, chronic exposures to PFOA in human drinking water supplies. (*See, e.g.*, Ex. D.)

As both US EPA and WVDEP are aware, there are at least two public drinking water supplies in the vicinity of the DuPont Plant in West Virginia where sampling for

PFOA revealed levels of PFOA in the treated water above the 0.05 ppb level of exposure considered in the C8 Science Panel studies: 1) the City of Parkersburg, West Virginia (most recent rounds of CCL3 sampling data submitted to US EPA and now posted on US EPA's website revealed PFOA as high as 0.0631 ppb after treatment on 3/25/14); and 2) the City of Vienna, West Virginia (reports submitted by DuPont to US EPA and posted in US EPA' public dockets confirm 0.056 ppb PFOA after treatment on last-known PFOA sampling date of 5/10/07). (*See* Ex. E). DuPont successfully used US EPA's and WVDEP's continuing failure to adopt any final long-term, chronic exposure limits for PFOA in drinking water to thwart all efforts by impacted Parkersburg residents to require DuPont to provide clean water through the court system. (*See, e.g.,* 9/30/08 Memorandum Opinion and Order in *Rhodes, et al., v. E.I. du Pont de Nemours and Co.,* Civil Action No. 6:06-cv-00530 (S.D. W. Va.) at 1 (West Virginia federal court denied Parkersburg residents' attempts to bring community/class-wide claims against DuPont for clean water through the judicial system, noting that, although the "plaintiffs have presented compelling evidence that exposure to C-8 may be harmful to human health, and the evidence certainly justifies the concerns expressed by the plaintiffs in this case," the Court could not certify those claims to proceed through the Court system at that time: "The fact that a public health risk may exist is more than enough to raise concern in the community and call government agencies to action, but it does not show the common individual injuries needed to certify a class action" for relief through the judicial system.).)

Thus, despite DuPont's acknowledgment to US EPA by at least 2006 that "it is prudent to minimize, where possible, exposure to biopersistent materials such as PFOA" and purported desire "to help promote reductions in PFOA in blood levels through alternate drinking supplies," (Ex. C at 3-4), DuPont aggressively fought and ultimately succeeded in preventing Parkersburg residents from obtaining clean water through the court system, even though DuPont knew that failure to remove PFOA from that water would allow PFOA to steadily build up and accumulate in the blood of the residents drinking that water at a ratio of approximately 105 ppb PFOA in blood for every 1 ppb PFOA in their drinking water. US EPA and WVDEP, likewise, have not required any action to date to abate these on-going exposures in either Parkersburg or Vienna, despite knowledge of the on-going contamination (and associated accumulation and build- up of PFOA in residents' blood) for almost a decade.

US EPA should re-assess its position with respect to these on-going PFOA exposures in light of existing health data. US EPA also should consider whether any steps need to be taken to insure that the appropriate parties remain bound under its existing Consent Orders and Memoranda of Understanding with DuPont on PFOA issues, in light of DuPont's recently announced intentions to soon "spin-off" and/or jettison certain operations and liabilities of DuPont relating to PFOA to a new entity to be known as "Chemours," (*see* Ex. F).

Very truly yours,

Robert A. Bilott

RAB:mdm
Encls: Exs. A-F
cc: Elizabeth Doyle, USEPA (w/encls.)(by regular U.S. mail)

United States Environmental Protection Agency
Regional Administrator
Region 5
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Chicago, IL 60604-3590

FEB 2 3 2015

Robert A. Bilott
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Cincinnati, Ohio 45202-3957

Dear Mr. Bilott:

Thank you for your January 20, 2015 letter requesting that the U.S. Environmental Protection Agency consider new health effects data to evaluate the 0.40 parts per billion (ppb) site-specific action level for perfluorooctanoic acid (PFOA) in EPA's 2009 consent order with DuPont's Washington Works Facility in West Virginia.

On February 28, 2014, EPA released a draft health effects document for PFOA for public comment and peer review: https://peerreview.versar.com/epa/pfoa/. When the document is finalized later this year a lifetime health advisory will be developed, which may replace our 2009 PFOA provisional (short-term) health advisory of 0.4 ppb. When that process is complete the action level established in the March 10, 2009 consent order between US EPA and DuPont may be re-evaluated.

Again, thank you for your letter. If you have further questions, please contact Debra Klassman, Associate Regional Counsel, of my staff, at 312-886-6742, or Lori Kier, Senior Assistant Regional Counsel, of Mr. Garvin's staff in Region 3, at 215-814 2656.

Sincerely,

Susan Hedman
Regional Administrator

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November 9, 2015

BY EMAIL AND REGULAR U.S. MAIL

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Randy C. Huffman
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West Virginia Department of Environmental Protection
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Re: *In the Matter of: E.I. du Pont de Nemours and Company*
(Docket Nos. SDWA-03-2009-0127 DS – SDWA-05-2009-0001)

Dear Ms. Hedman, Mr. Garvin and Mr. Huffman:

This letter serves as a follow up to my letter to you dated January 20,2015, (extra copy enclosed), to which US EPA Region 5 responded on February 23, 2015, (extra copy enclosed), but to which neither US EPA Region 3 nor the West Virginia Department of Environmental Protection ("WVDEP") ever responded.

As noted in my prior letter, we first asked your agencies to take immediate action to address on-going contamination of human drinking water supplies with PFOA more than 14 years ago. Since that time, WVDEP has done nothing to establish any regulatory standards or limits for PFOA in drinking water, choosing, instead, to simply

defer to whatever US EPA eventually decides to do. US EPA, however, *still* has not established – nor even proposed – any standards or limits for long term (more than a few weeks or even a few months) exposure to PFOA in drinking water.

In the meantime, data collected from public drinking water supplies across the country and provided directly to US EPA has confirmed the presence of PFOA in public drinking water supplies in over 20 states in all regions of the Country. (*See* http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm.) As US EPA is aware, the levels of PFOA found in many of these water supplies – more than a dozen – exceed the 0.05 ppb PFOA level where probable links were found between such PFOA drinking water exposure levels and six serious diseases, including cancer. (*See id.*) Even more exceed the levels that have been set or recommended by other regulatory bodies (such as the State of New Jersey) for long-term PFOA exposures, or the levels that the most recent scientific research now indicates may be excessive. (*See* enclosed 1/20/15 letter (and references).)

Nevertheless, when US EPA Region 5 responded to my prior letter, it indicated that no further action would be taken by US EPA to address any of this on-going contamination of public water supplies until its previously-released "draft health effects document for PFOA" was finalized, which Region 5 stated would occur "later this year." As we are now nearing the end of the year and the document still has not been finalized (nor has any information been released suggesting when any such action might occur), we request that US EPA confirm the schedule for finalizing the document and moving forward with appropriate actions to protect the public health.

Very truly yours,

Robert A. Bilott

RAB:mdm
Encls:
cc: Elizabeth Doyle, USEPA (w/encls.)(by regular U.S. mail)

13988385.1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

DEC 18 2015

Robert A. Bilott, Partner
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Dear Mr. Bilott:

Thank you for your November 9, 2015 letter requesting that the U.S. Environmental Protection Agency provide you with an update on EPA's draft perfluorooctanoic acid (PFOA) health effects document, which addresses long-term PFOA exposure. EPA released the draft PFOA health effects document in February 2014 for purposes of public comment (scientific views) and peer review.

Please be advised that the timeline for developing a lifetime health advisory level for PFOA has changed slightly since EPA Regions 3 and 5's combined response to you dated February 23, 2015. The EPA Office of Water now expects to complete its efforts to develop a revised Health Advisory for both PFOA by early 2016.

Once a final risk assessment is completed, or if further information about the health effects of PFOA indicates that it is necessary, EPA may re-evaluate the PFOA action level established in the March 9, 2010, Safe Drinking Water Act Order on Consent between EPA and DuPont.

Thank you for your continued interest in these matters. If you have further questions, please contact Lori Kier, Esq., Senior Assistant Regional Counsel, of Region 3 at 215-814 2656, or Jacqueline Clark, Esq., Associate Regional Counsel, in Region 5, at 312-353-4191.

Sincerely,

Jon M. Capacasa
Director, Water Protection Division

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December 16, 2015

BY EMAIL AND REGULAR U.S. MAIL

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Ileana Arias, PhD
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Re: Request For Investigation/Disclosure of PFOA Human Drinking Water Impacts in Northern Kentucky

Dear Ms. McTeer Toney and Dr. Arias:

On November 11, 2015, researchers at Brown University publicly announced the release of a study finding that children born to mothers in a Cincinnati, Ohio, area cohort with elevated levels of PFOA in their blood had increased adiposity at age 8 and had greater BMI gains from age 2 to 8 than children with lower PFOA exposures. (*See* Ex. A.) As for the extent of the elevated PFOA exposures in the cohort being studied, the researchers reported that the "average exposure measured among the mothers in the cohort was more than twice that of a representative sample of pregnant women from the United States." (*Id.* at 2.)

With respect to the potential source of the elevated levels of PFOA found in the blood of this Cincinnati-area cohort, the researchers referred to an earlier study that purportedly noted increased PFOA blood levels among school-age Cincinnati-area girls whose drinking water may have been impacted by PFOA contamination coming from the Ohio River. (*See id.* (published paper at 5).) That earlier study, published in 2014, reported that the Cincinnati-area girls receiving their water from the public water supply

in Northern Kentucky (directly across the Ohio River from downtown Cincinnati) had significantly increased levels of PFOA in their blood. (*See* Ex. B at 329.) More specifically, the researchers reported finding a median serum PFOA concentration of 22.0 ppb in the young girls consuming water from the Northern Kentucky water supply, with 48 out of 51 of those girls having PFOA serum concentrations above the 95th percentile of PFOA serum concentrations reported from a 2005-2006 nation-wide survey of PFOA serum concentrations. (*Id.*) According to these researchers, this elevated "PFOA serum concentration was highly associated ... with cumulative years of drinking water from the NKY water distribution zone." (*Id.* at 330-331.)

In support of their hypothesis that the elevated level of PFOA found among the girls in Northern Kentucky was attributable to elevated levels of PFOA in their drinking water, the researchers compared the PFOA serum concentrations to those found among girls living directly across the Ohio River who received their drinking water from the City of Cincinnati's public water supply. (*See id.*) This was done because both the Cincinnati and Northern Kentucky public water supplies draw water from the approximately same general area of the Ohio River, but only the Cincinnati public water supply was being treated at the time by using the type of granular activated carbon ("GAC") filtration system that has been shown to reduce PFOA levels prior to entry into the public water distribution system. (*See id.* at 332.) After confirming that the PFOA serum level among the girls in Northern Kentucky was significantly higher than the levels found in the serum of the girls drinking Cincinnati water, the researchers concluded that the lack of GAC filtration of the drinking water in Northern Kentucky at the time "could be a plausible explanation for the differences ... found in serum concentrations." (*Id.*) According to these same researchers, the Northern Kentucky public water district first initiated this type of GAC treatment in 2012. (*Id.*)[1]

As for the amount of PFOA purportedly present in the Ohio River raw source water for the Northern Kentucky drinking water supply, the researchers noted that PFOA had been found in detectable amounts in the untreated Ohio River water near the Greater Cincinnati/Northern Kentucky water supply area. (*See id.* at 332.) Based on responses to our recent public file requests, we have now learned that this PFOA was detected at levels between 0.016 ppb and 0.1 ppb in samples of the untreated Ohio River water taken near the Northern Kentucky public water supply between 2005 and 2009, (*see* Ex. D), with PFOS also being found in such water as high as 0.0012 ppb in 2010, (*see* Ex. E).

As for the origin or source of the PFOA in the Ohio River, the researchers stated that they "know of no PFC compound manufacturing sites in the GC [Greater Cincinnati]

[1] According to documents produced by the Northern Kentucky Water Service District in late 2015 in response to our public file request, the water district never sampled any of its finished drinking water (as supplied to customers) for PFOA or PFOS prior to the initiation of GAC treatment in 2012, thus we have been unable to locate any data confirming what amount (if any) PFOS or PFOS was present in any of that water prior to such treatment. (*See* Ex. C.)

area," and thus hypothesized that "a source upriver from the GC [Greater Cincinnati] area may have contributed to exposures in girls from NKY through their drinking water." (Ex. B at 331-32.) With respect to the identify of any such "source upriver," the researchers noted only that "an industrial facility" located "about 285 miles upriver ...may represent a potential source of exposure via the Ohio River for the girls from NKY," and that sampling for PFOA in the Ohio River in 2009 revealed that "levels of PFOA progressively decreased with increasing distance downriver from Parkersburg WV to the Greater Cincinnati area." (*Id.* at 332.) Although the researchers did not mention the name of that facility near Parkersburg, they did reference a "legal settlement" involving the facility that spurred creation of the "C8 Health Project," which is well-known to involve extensive investigation of the community residents impacted by PFOA released by the Washington Works manufacturing facility originally owned and operated by E. I. du Pont de Nemours and Company, and now owned and operated by the Chemours Company. (*See id.*) As of today's date, however, we are unaware of any steps taken or ordered by either or your agencies (or any other regulatory entity) to investigate and address or require any other party to investigate address the nature, extent, and source of the elevated PFOA levels found in the Ohio River in the Greater Cincinnati Area.

Moreover, we are unaware of any efforts being taken or ordered by your Agencies (or any other entity) to evaluate the nature and extent of any elevated levels of PFOA in the serum of the tens of thousands of people in Northern Kentucky who may have been exposed to PFOA in their drinking water. Even though GAC filtration may be in place now, that treatment does not address past exposures to PFOA in drinking water, which, as your Agencies are aware, would result in the steady accumulation of elevated levels of PFOA in serum from even the smallest PFOA exposures, given the extremely persistent nature of the chemical. Moreover, because of the long half-life of the chemical, any such elevated levels of PFOA in serum would be expected to remain in an exposed person's blood/body for many years and only slowly decrease over time once all exposures stopped. Although blood levels were evaluated from a small group of young girls in the study referenced above, we are unaware of any investigation having been undertaken or ordered of the larger community in Northern Kentucky – adults, children, elderly, infirm, etc. – to assess the extent and nature of any elevation of PFOA serum levels.

Most troubling, however, is that we are unaware of any meaningful public disclosure of potentially elevated PFOA serum levels and associated adverse health effects to all of the residents potentially impacted in Northern Kentucky. Although we understand that the families of the actual participants in the study involving the several dozen young girls in Northern Kentucky were informed of their serum results by the study sponsors and were provided some related information in private meetings with those families back in 2007, we are unaware of any disclosures to the larger Northern Kentucky community having occurred at that time (or since). (*See* Ex. F.) The researchers reported that the "superintendent of the school district attended" one of the

meetings in 2007 and even "commented that the findings might have implications beyond the study families and perhaps the county" and apparently inferred "that there would be follow-up if health concerns came to light." (*Id.* at 5.) The researchers also noted that they "met with relevant water district personnel in Greater Cincinnati to notify them of the biomarker [PFOA serum level] findings," and even drafted a press release "should the need arise for a more public statement concerning the findings." (*Id.*) As of today's date, however, we are unaware of any such press release having been released or any "more public statement" being made to the broader Northern Kentucky community, prior to the November 11, 2015, press release announcing results of the most recent adiposity study results, which was not to our knowledge reported by any of the local newspapers serving Northern Kentucky. As a result, the Northern Kentucky community (with the possible exception of some of the original study participants and their families) remains completely unaware that they may have elevated PFOA serum levels or how any such elevated PFOA serum levels may relate to their health.

The need for immediate, meaningful, community-wide public disclosure in this regard is imperative to protect public health. Since the original meetings were held in 2007 with the families of the Northern Kentucky study participants, school superintendent, and water district personnel, significant additional health information has been released confirming links between elevated exposures to PFOA through drinking water and serious human disease. More specifically, independent, published, peer-reviewed scientific research has confirmed that community-level exposure to PFOA in drinking water at concentrations as low as 0.05 ppb for as little as one year is capable of causing: 1) testicular cancer; 2) kidney cancer; 3) ulcerative colitis; 4) thyroid disease; 5) preeclampsia/pregnancy-induced hypertension; and medically-diagnosed high cholesterol (hypercholesterolemia). (*See* www.C8sciencepanel.org for copies of or links to all such data.) These links between PFOA exposure in drinking water and serious disease were found after independent evaluation of tens of thousands of residents – adults, children, elderly, and the infirm – exposed to PFOA through contamination caused by DuPont's manufacturing operations at its Washington Work's plant upriver near Parkersburg, West Virginia. (*See id.*) The average level of PFOA found in the serum of all of the female community residents who participated in those studies where the disease links were found was reported to be approximately 30 ppb. (*See* Ex. B at 332.) In October of 2015, a woman who had been exposed to PFOA in her drinking water in that area and had a PFOA serum test result of 19 ppb won a $1.6 Million verdict against DuPont after an Ohio jury found that DuPont's contamination of her drinking water with PFOA caused her kidney cancer. (*See* Ex. G.)

We, therefore, request that your Agencies immediately take those steps necessary to inform the Northern Kentucky community of the potential health risks posed by potentially-elevated PFOA serum levels, and to investigate, assess, and determine the full extent, nature, and source of any such elevated PFOA serum levels so that steps can be taken to insure that any potential for continuing, on-going exposure is stopped. Given our extensive involvement in PFOA scientific, legal, and regulatory

issues over the last 15 years, we would be happy to assist in any way we can so that complete and accurate information is provided in the most appropriate and timely manner possible.

Thank you.

Very truly yours,

Robert A. Bilott

RAB:mdm
Ecls:

EPA Statement on Private Wells in

The Town of Hoosick and Village of Hoosick Falls, NY

January 28, 2016

The EPA is developing a lifetime health advisory level for PFOA. While this work continues, the EPA recommends that people in the Town of Hoosick and the Village of Hoosick Falls who have private wells at which PFOA has been found to be present at a level greater than 100 parts per trillion not use that water for drinking or cooking, and instead take advantage of the free bottled water that is being made available at the Tops Market in Hoosick Falls. In addition, the EPA recommends that people in the Town of Hoosick and the Village of Hoosick Falls who have private wells that have not yet been tested for the presence of PFOA ask the New York State Department of Health to test their well and, in the meantime, take advantage of the bottled water available at the Tops Market in Hoosick Falls.

Bilott, Robert A.

From: Bilott, Robert A.
Sent: Friday, January 29, 2016 4:50 PM
To: 'Kaplan.robert@Epa.gov'; 'Garvin.shawn@Epa.gov'; 'Randy.C.Huffman@Wv.Gov'; 'Klassman.debra@Epa.gov'; 'Kier.lori@Epa.gov'
Subject: FW: In the Matter of: E.I. du Pont de Nemours and Comapny (Docket Nos: SDWA-03-2009-0127 DS/ SDWA-05-2009-0001)
Attachments: EPA Response Letter 2 23 15.pdf; epa_statement_on_private_wells_in_the_town_of_hoosick.pdf; [Untitled].pdf

Ladies and Gentlemen:

Given the updated guidance released by US EPA last night (attached) referencing a 0.1 ppb action level for PFOA in human drinking water, we repeat the request we made over a year ago (as set forth in our attached letter) that steps be taken immediately to insure that the 2009 Consent Order referenced in our letter is modified accordingly to reference and incorporate the new 0.1 ppb guideline and that all appropriate parties are and/or remain bound by its terms. (According to EPA's earlier response (also attached), such actions would be considered when such a new guidance number was released.) We also request that any water supply previously tested or to be tested under that Consent Order with results at or above 0.1 ppb that is not already being treated to remove any such PFOA be addressed accordingly. Thank you.

Rob Bilott

lott, Robert A.
Sent: Tuesday, January 20, 2015 4:32 PM
To: hedman.susan@epa.gov; Garvin.shawn@Epa.gov; Randy.C.Huffman@Wv.Gov
Cc: Elizabeth A. Doyle (doyle.elizabeth@epa.gov)
Subject: In the Matter of: E.I. du Pont de Nemours and Comapny (Docket Nos: SDWA-03-2009-0127 DS/ SDWA-05-2009-0001)

Document attached.

Taft/

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Summary of Public Water Supply PFOA Data as Reported to EPA in UCMRR Program

No.	PWS	State	Sample Location	Date	Results
1	Warminster Municipal Authority	PA	Well 26 EPTDS	2014/06/09	0.349
1	Warminster Municipal Authority	PA	Well 26 EPTDS	2013/11/19	0.291
1	Warminster Municipal Authority	PA	Well 2 EPTDS	2013/11/19	0.0343
1	Warminster Municipal Authority	PA	Well 2 EPTDS	2014/06/09	0.0216
1	Warminster Municipal Authority	PA	Well 13 EPTDS	2013/11/19	0.122
1	Warminster Municipal Authority	PA	Well 13 EPTDS	2014/06/09	0.0796
1	Warminster Municipal Authority	PA	Well 10 EPTDS	2013/11/19	0.0885
1	Warminster Municipal Authority	PA	Well 10 EPTDS	2014/06/09	0.0822
1	Warminster Municipal Authority	PA	Well 15 EPTDS	2013/11/19	0.0246
1	Warminster Municipal Authority	PA	Well 5 EPTDS	2013/11/19	0.0231
1	Warminster Municipal Authority	PA	Well 5 EPTDS	2014/06/09	0.0201
1	Warminster Municipal Authority	PA	Well 14 EPTDS	2013/11/19	0.0228
1	Warminster Municipal Authority	PA	Well 9 EPTDS	2013/11/19	0.0203

No.	PWS	State	Sample Location	Date	Results
2	Oakdale	MN	Well 7 Entry Point	2015/01/05	0.338
2	Oakdale	MN	Well 7 Entry Point	2015/07/14	0.322
2	Oakdale	MN	Well 1 Entry Point	2015/07/14	0.0986
2	Oakdale	MN	Well 1 Entry Point	2015/01/05	0.0929
2	Oakdale	MN	Well 2 Entry Point	2015/01/05	0.0614
2	Oakdale	MN	Well 2 Entry Point	2015/0714	0.0583
3	Horsham Water & Sewer Authority	PA	Well 26 EPTDS	2014/06/24	0.29
3	Horsham Water & Sewer Authority	PA	Well 40 EPTDS	2014/06/24	0.063
3	Horsham Water & Sewer Authority	PA	Well 17 EPTDS	2013/06/24	0.023
3	Horsham Water & Sewer Authority	PA	Well 17 EPTDS	2014/12/09	0.026
3	Horsham Water & Sewer Authority	PA	Well 10 EPTDS	2014/06/24	0.02
3	Horsham Water & Sewer Authority	PA	Well 10 EPTDS	2014/12/09	0.026
4	Doylestown Twp. Muni. Authority	PA	Cross Keys Well EP #113	2014/02/18	0.20605
5	Artesian Water Supply	DE	Wilmington Manor 3 Plant EPTDS	2013/07/17	0.14
5	Artesian Water Supply	DE	Wilmington Manor 3 Plant EPTDS	2014/01/28	0.14

No.	PWS	State	Sample Location	Date	Results
5	Artesian Water Supply	DE	Jefferson Farm Plant EPTDS	2013/07/07	0.06
5	Artesian Water Supply	DE	Jefferson Farm Plant EPTDS	2014/01/28	0.04
5	Artesian Water Supply	DE	Castle Hills EPTDS	2014/07/16	0.05
5	Artesian Water Supply	DE	Castle Hills EPTDS	2013/07/17	0.04
5	Artestian Water Supply	DE	Midvale Plant EPTDS	2013/08/12	0.04
5	Artestian Water Supply	DE	Midvale Plant EPTDS	2014/01/28	0.04
5	Artesian Water Supply	DE	Wilmington Manor 1 Plant EPTDS	2013/07/17	0.03
5	Artesian Water Supply	DE	Wilmington Manor 1 Plant EPTDS	2014/01/28	0.03
6	City of Vienna	WV	Treatment plant for Well 11/14 (EP#3 after treatment)	2015/05/27	0.129
6	City of Vienna	WV	Treatment plant for Well 7/8 (EP #1 after treatment)	2015/05/27	0.0991
6	City of Vienna	WV	Treatment plant for Well 9/10 (EP #2 after treatment)	2015/05/27	0.0758
7	Warrington Township Water & Sewer Department	PA	Wells 1, 2 & 6 EP	2014/11/11	0.11839
7	Warrington Township Water & Sewer Department	PA	Well 3 EP	2014/11/11	0.02015
7	Warrington Township Water & Sewer Department	PA	Well 9 EP	2015/05/11	0.02883

No.	PWS	State	Sample Location	Date	Results
8	West Morgan-East Lawrence	AL	Tenn. River + Treatment	2014/02/05	0.1
9	Security WSD	CO	EPTDS from Air Stripping Plant	2014/07/31	0.09
9	Security WSD	CO	EPTDS from Air Stripping Plant	2014/01/29	0.08
9	Security WSD	CO	EPTDS from Chlorinator for W9 Well	2014/07/30	0.08
9	Security WSD	CO	EPTDS from Chlorinator for W9 Well	2014/01/15	0.07
9	Security WSD	CO	EPTDS from Chlorinator for W8 Well	2014/07/31	0.08
9	Security WSD	CO	EPTDS from Chlorinator for W8 Well	2014/01/15	0.08
9	Security WSD	CO	EPTDS from CT 150,000 Gallon Steel Tank	2014/07/15	0.07
9	Security WSD	CO	EPTDS from CT 150,000 Gallon Steel Tank	2014/01/22	0.07
9	Security WSD	CO	EPTDS from Chlorinator for S16 Well	2014/07/30	0.07
9	Security WSD	CO	EPTDS from Chlorinator for S16 Well	2014/01/22	0.06
9	Security WSD	CO	EPTDS from Chlorinator for S15 Well	2014/07/30	0.07
9	Security WSD	CO	EPTDS from Chlorinator for S15 Well	2014/01/21	0.06

No.	PWS	State	Sample Location	Date	Results
9	Security WSD	CO	EPTDS from Chlorinator for R2 Well	2014/07/29	0.06
9	Security WSD	CO	EPTDS from Chlorinator for R2 Well	2014/01/14	0.06
9	Security WSD	CO	EPTDS from Chlorinator for W12 Well	2014/07/30	0.05
9	Security WSD	CO	EPTDS from Chlorinator for W12 Well	2014/01/15	0.04
9	Security WSD	CO	EPTDS from Chlorinator for FV4 Well	2014/07/29	0.05
9	Security WSD	CO	EPTDS from Chlorinator for FV4 Well	2014/01/14	0.05
9	Security WSD	CO	EPTDS from Chlorinator for S9 Well	2014/01/14	0.05
9	Security WSD	CO	EPTDS from Chlorinator for S9 Well	2014/07/29	0.04
9	Security WSD	CO	EPTDS from Chlorinator for S2 Well	2014/07/29	0.05
9	Security WSD	CO	EPTDS from Chlorinator for S2 Well	2014/01/21	0.05
9	Security WSD	CO	EPTDS from Chlorinator for S8 Well	2014/07/30	0.04
9	Security WSD	CO	EPTDS from Chlorinator for S10 Well	2014/07/30	0.04

No.	PWS	State	Sample Location	Date	Results
9	Security WSD	CO	EPTDS from Chlorinator for S10 Well	2014/01/14	0.04
9	Security WSD	CO	EPTDS from Chlorinator for R1 Well	2014/01/14	0.04
9	Security WSD	CO	EPTDS from Chorinator for R1 Well	2014/08/11	0.04
9	Security WSD	CO	EPTDS from FVA Intertie	2014/07/30	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S11 Well	2014/07/30	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S11 Well	2014/04/22	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S7 Well	2014/07/30	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S7 Well	2014/01/22	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S4 Well	2014/07/30	0.03
9	Security WSD	CO	EPTDS from Chlorinator for S4 Well	2014/02/10	0.03
10	VAW Water System, Inc.	AL	West Morgan-East Lawrence EPTDS	2014/02/18	0.09
10	VAW Water System, Inc.	AL	West Morgan-East Lawrence EPTDS	2014/05/28	0.02
10	VAW Water System, Inc.	AL	West Morgan-East Lawrence Intertie EPTDS	2014/08/05	0.02

No.	PWS	State	Sample Location	Date	Results
11	Town of Cumberland	RI	Abbott Run #1 TP EPTDS	2015/02/18	0.081
12	Dover Water Department	NH	Griffin Well Treatment Plant (finished water sample)	2014/03/24	0.067
13	Emerald Coast Utilities Authority	FL	Hagler (EP tap)	2014/11/11	0.065
13	Emerald Coast Utilities Authority	FL	Hagler (EP tap)	2014/06/17	0.043
13	Emerald Coast Utilities Authority	FL	Bronson East (EP tap)	2014/05/14	0.024
14	Parkersburg Utility Board	WV	Treatment Plant (Entry Point after Treatment)	2014/03/25	0.0631
14	Parkersburg Utility Board	WV	Treatment Plant (Entry Point after Treatment)	2014/09/09	0.0412
15	Hyannis Water System	MA	Mary Dunn Well 2 EPTDS	2014/05/22	0.062
15	Hyannis Water System	MA	Mary Dunn Well 2 EPTDS	2013/11/20	0.02
15	Hyannis Water System	MA	Maher Treatment Plant EPTDS	2014/05/22	0.02
15	Hyannis Water System	MA	Mary Dunn Well 3 EPTDS	2014/05/22	0.02
16	Colbert County Rural Water System	AL	West Lawrence (WL meter)	2014/12/10	0.06
16	Colbert County Rural Water System	AL	West Lawrence (WL meter)	2014/06/16	0.02
16	Colbert County Rural Water System	AL	Cherokee (North Pike meter)	2014/06/16	0.02
16	Colbert County Rural Water System	AL	Muscle Shoals (Muscle Shoals meter)	2014/06/16	0.02

No.	PWS	State	Sample Location	Date	Results
17	Rome	GA	Bruce Hamler Water Plant (finished water tap)	2015/02/12	0.06
17	Rome	GA	Bruce Hamler Water Plant (finished water tap)	2015/05/12	0.05
18	Freeport	IL	Filter Plant EPTDS	2014/12/10	0.059
19	South Orange Water Dept.	NJ	Meadowbrook Well TP EPTDS	2015/03/25	0.058
20	New Jersey American (Raritan)	NJ	Hummocks Station Plant EPTDS	2015/03/09	0.054
20	New Jersey American (Raritan)	NJ	Quinton Avenue Well (Kenilworth)	2015/03/13	0.035
20	New Jersey American (Raritan)	NJ	Springfield Plant EPTDS	2015/03/03	0.034
20	New Jersey American (Raritan)	NJ	Clinton Avenue Well EPTDS	2015/03/13	0.032
20	New Jersey American (Raritan)	NJ	Charles St. Comp. Del. EPTDS	2015/03/09	0.028
20	New Jersey American (Raritan)	NJ	Rock Avenue Well (Piscataway)	2015/03/11	0.026
20	New Jersey American (Raritan)	NJ	Netherwood Plant EPTDS	2015/03/03	0.023
20	New Jersey American (Raritan)	NJ	Greenbrook Plant (Jefferson Ave.)	2015/03/03	0.02

No.	PWS	State	Sample Location	Date	Results
21	Eastern Municpal Water District	CA	Well 59 (Indian Ave.) EP #82: Treated	2013/06/18	0.053
21	Eastern Municpal Water District	CA	Well 59 (Indian Ave.) EP #82: Treated	2013/10/08	0.044
22	Fort Lewis Water - Cantonment	WA	Well 17 EPTDS	2014/12/29	0.0511
23	City of Tempe	AZ	EPDS001	2014/01/14	0.05
23	City of Tempe	AZ	EPDS001	2013/07/16	0.044
23	City of Tempe	AZ	EPDS004	2013/07/16	0.032
23	City of Tempe	AZ	EPDS004	2014/01/14	0.023
24	Liberty Water LPSCO (AZ)	AZ	Well 02 Airline POE	2014/11/18	0.05
24	Liberty Water LPSCO (AZ)	AZ	Well 02 Airline POE	2014/05/29	0.05
25	Hudson Water Supply	MA	Chesnut St. WTP (EPTDS)	2015/04/30	0.05
26	West Lawrence Water Co-op	AL	West Morgan-East Lawrence Water Intertie (EPTDS)	2015/05/26	0.05
26	West Lawrence Water Co-op	AL	West Morgan-East Lawrence Water Intertie (EPTDS)	2015/02/16	0.03
27	United Water Delaware	DE	Stanton Plant DEP	2014/11/06	0.0499
27	United Water Delaware	DE	Stanton Plant DEP	2014/02/14	0.0263
28	Montclair Water Bureau	NJ	Glenfield Well (Maple Ave.)	2014/11/21	0.0485
28	Montclair Water Bureau	NJ	Glenfield Well (Maple Ave.)	2015/05/21	0.04212
28	Montclair Water Bureau	NJ	Rand Well (Fullerton Ave.)	2014/11/21	0.04653

No.	PWS	State	Sample Location	Date	Results
28	Montclair Water Bureau	NJ	Rand Well (Fullerton Ave.)	2015/05/21	0.04274
28	Montclair Water Bureau	NJ	Lorraine Well (Lorraine Ave. & N. Mt. Ave.)	2014/11/21	0.04405
28	Montclair Water Bureau	NJ	Lorraine Well (Lorraine Ave. & N. Mt. Ave.)	2015/05/21	0.03532
29	Town of Hempstead Water District	NY	Bowling Green TP EPTDS	2014/06/09	0.048
29	Town of Hempstead Water District	NY	Bowling Green TP EPTDS	2015/01/30	0.045
30	Widefield WSD	CO	Chlorinator for W3 Well (EPTDS)	2014/05/14	0.048
30	Widefield WSD	CO	Chlorinator for W3 Well (EPTDS)	2013/11/12	0.031
30	Widefield WSD	CO	Chlorinator for W4 Well (EPTDS)	2014/05/19	0.045
30	Widefield WSD	CO	Chlorinator for W4 Well (EPTDS)	2013/11/12	0.037
30	Widefield WSD	CO	Chlorinator for E2 Well (EPTDS)	2014/05/14	0.036
30	Widefield WSD	CO	Chlorinator for W7 Well (EPTDS)	2014/05/14	0.036
30	Widefield WSD	CO	Chlorinator for C36 Well (EPTDS)	2013/11/06	0.03
30	Widefield WSD	CO	Chlorinator & Aeration for Well W1 (EPTDS)	2013/11/20	0.024
30	Widefield WSD	CO	Chlorinator & Aeration for Well W1 (EPTDS)	2014/06/19	0.021
31	Town of Payson	AZ	Country Club #2 Well (EPTDS)	2014/06/09	0.048

No.	PWS	State	Sample Location	Date	Results
31	Town of Payson	AZ	Country Club #2 Well (EPTDS)	2014/12/10	0.042
31	Town of Payson	AZ	Lake Drive Well (EPTDS)	2014/06/04	0.042
31	Town of Payson	AZ	Lake Drive Well (EPTDS)	2014/12/15	0.04
31	Town of Payson	AZ	Mountain View Well (EPTDS)	2014/06/26	0.038
31	Town of Payson	AZ	Mountain View Well (EPTDS)	2014/12/10	0.036
31	Town of Payson	AZ	Country Club #1 Well (EPTDS)	2014/12/10	0.02
32	Orange Water Dept.	NJ	Gist Place (EPTDS)	2015/02/03	0.044
33	West Bend Waterworks	WI	(Tower 2 Air Stripper)	2014/11/03	0.04317
33	West Bend Waterworks	WI	Treatment Plant (Tower 1 Air Stripper)	2014/05/12	0.02393
33	West Bend Waterworks	WI	Treatment Plant (Tower 2 Air Stripper)	2014/05/12	0.02155
34	Westfield Water Dept.	MA	Well 7 EPTDS	2013/02/27	0.043
35	Atlantic City MUA	NJ	Treatment Plant	2015/02/25	0.043
36	Merrimack Village District	NH	Pump Station 5 (Blend 4 EPTDS)	2014/04/14	0.042
37	City of Corona	CA	R-3 Blend (EP #35: SB-9)	2014/07/10	0.042
37	City of Corona	CA	R-3 Blend (EP #35: SB-9)	2014/01/16	0.038
37	City of Corona	CA	19579 Temescal Canyon Rd. (D3-1)	2014/01/16	0.036

No.	PWS	State	Sample Location	Date	Results
37	City of Corona	CA	19579 Temescal Canyon Rd. (D3-1)	2013/10/09	0.023
37	City of Corona	CA	Ontario/Garretson Zone 3 (SB-3)	2013/10/23	0.029
37	City of Corona	CA	Lester SWTP (EP#19: SS-1)	2014/01/15	0.026
38	Elsinore Valley Municpal Water District	CA	Canyon Lake WTP (EP#2: Combined Effluent)	2014/12/23	0.041
38	Elsinore Valley Municpal Water District	CA	Canyon Lake WTP (EP#2: Combined Effluent)	2013/09/19	0.038
38	Elsinore Valley Municpal Water District	CA	Canyon Lake WTP (EP#2: Combined Effluent)	2014/06/19	0.038
38	Elsinore Valley Municpal Water District	CA	Canyon Lake WTP (EP#2: Combined Effluent)	2014/10/24	0.035
39	Hastings	MN	Well 8 Entry Point	2014/12/10	0.0405
39	Hastings	MN	Well 8 Entry Point	2015/06/09	0.0324
40	Bloomington	IL	Plant on South Side of Dam (EPTDS from plant)	2013/03/06	0.04
41	City of Fountain	CO	Fountain Valley Authority Intertie (EPTDS)	2013/04/16	0.04
41	City of Fountain	CO	Chlorination for Well 4 (EPTDS)	2013/07/17	0.04
41	City of Fountain	CO	Chlorination for Well 4 (EPTDS)	2013/01/15	0.03
41	City of Fountain	CO	Chlorination for Well 2 (EPTDS)	2013/07/17	0.04
41	City of Fountain	CO	Chlorination for Well 2 (EPTDS)	2013/01/15	0.04

No.	PWS	State	Sample Location	Date	Results
41	City of Fountain	CO	Chlorination for Well 1 (EPTDS)	2013/07/17	0.04
41	City of Fountain	CO	Chlorination for Well 1 (EPTDS)	2013/01/15	0.04
41	City of Fountain	CO	Chlorination for Well 3 (EPTDS)	2013/07/17	0.03
41	City of Fountain	CO	Chlorination for Well 3 (EPTDS)	2013/01/15	0.02
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/04/15	0.04
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/07/22	0.04
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/10/21	0.03
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/01/21	0.03
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/04/15	0.03
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/10/21	0.03
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2013/07/08	0.02
42	Southside Waterworks/ Rainbow City Utilities Board (Gadsden, AL)	AL	Gadsden Water Intertie (EPTDS)	2014/01/15	0.02
43	Gadsden Waterworks & Sewer Board	AL	Water Treatment Plant	2014/10/02	0.04
43	Gadsden Waterworks & Sewer Board	AL	Water Treatment Plant	2015/04/21	0.03
43	Gadsden Waterworks & Sewer Board	AL	Water Treatment Plant	2014/01/27	0.02
44	Fort Drum	NY	Water Treatment Plant (WTP01EP)	2015/03/04	0.04
44	Fort Drum	NY	Water Treatment Plant (WTP01EP)	2014/09/08	0.03

No.	PWS	State	Sample Location	Date	Results
45	Northeast Alabama Water System	AL	Centre Water (MM)	2015/03/12	0.04
45	Northeast Alabama Water System	AL	Centre Water (MM)	2015/02/27	0.04
45	Northeast Alabama Water System	AL	Centre Water (MM)	2014/06/12	0.03
45	Northeast Alabama Water System	AL	Centre Water (MM)	2014/12/16	0.03
45	Northeast Alabama Water System	AL	Albertville (MM)	2015/03/12	0.02
46	Bethany	OK	Water Treatment Plant EP	2015/05/11	0.04
46	Bethany	OK	Water Treatment Plant EP	2015/02/10	0.034
47	United Water PA	PA	Airport EPTDS	2014/02/04	0.038
48	Woodbury	MN	Well 9 Entry Point	2015/0415	0.0373
48	Woodbury	MN	Well 9 Entry Point	2014/10/14	0.0279
49	Fair Lawn Water Dept.	NJ	Westmoreland TP (EPTDS)	2013/01/29	0.03678
49	Fair Lawn Water Dept.	NJ	Westmoreland TP (EPTDS)	2013/07/30	0.0304
49	Fair Lawn Water Dept.	NJ	Water Comm. (EPTDS)	2013/11/26	0.03138
49	Fair Lawn Water Dept.	NJ	Dorothy St. TP (EPTDS)	2013/11/26	0.02699
49	Fair Lawn Water Dept.	NJ	Dorothy St. TP (EPTDS)	2013/05/28	0.0253
49	Fair Lawn Water Dept.	NJ	Well 28 TP (treatment house)	2013/01/29	0.02684
49	Fair Lawn Water Dept.	NJ	Well 28 TP (treatment house)	2013/07/30	0.02062
49	Fair Lawn Water Dept.	NJ	Cadmus TP (EPTDS)	2013/07/30	0.0217

No.	PWS	State	Sample Location	Date	Results
50	United Water - Rahway	NJ	Treatment Plant (EPTDS)	2014/10/07	0.033
50	United Water - Rahway	NJ	Treatment Plant (EPTDS)	2014/07/21	0.025
50	United Water - Rahway	NJ	Treatment Plant (EPTDS)	2014/04/08	0.023
50	United Water - Rahway	NJ	Treatment Plant (EPTDS)	2014/01/15	0.022
51	Oatman Water Company	AZ	Well #1 (Finished Tap Water)	2014/10/29	0.032
51	Oatman Water Company	AZ	Well #1 (Finished Tap Water)	2014/04/12	0.03
52	Garfield Water Dept.	NJ	Well 8C Treatment Plant	2014/04/28	0.031
52	Garfield Water Dept.	NJ	Well 8C Treatment Plant	2013/10/21	0.026
52	Garfield Water Dept.	NJ	Elmwood Park Station Treatment Plant	2014/04/28	0.03
52	Garfield Water Dept.	NJ	Elmwood Park Station Treatment Plant	2013/10/21	0.026
53	CA American Water Co. - Suburban	CA	Nut Plains (EP #35: Treated)	2014/10/08	0.031
53	CA American Water Co. - Suburban	CA	Nut Plains (EP #35: Treated)	2015/04/07	0.026
54	Orange Water & Sewer Authority	NC	Plant Clearwell (Effluent)	2014/02/11	0.03
55	Calhoun	GA	Mauldin Rd. Water Plant (finished water tap)	2015/02/04	0.03

No.	PWS	State	Sample Location	Date	Results
55	Calhoun	GA	Brittany Drive Water Plant (finished water tap)	2015/08/05	0.02
55	Calhoun	GA	Brittany Drive Water Plant (finished water tap)	2015/05/11	0.02
55	Calhoun	GA	Brittany Drive Water Plant (finished water tap)	2015/02/03	0.02
56	City of DuPont Water System	WA	Hoffman Hill Well #1 (EPTDS)	2014/10/13	0.03
56	City of DuPont Water System	WA	Hoffman Hill Well #2 (EPTDS)	2014/10/13	0.027
56	City of DuPont Water System	WA	Hoffman Hill Well #2 (EPTDS)	2014/04/08	0.024
57	Town of Fuquay-Varina	NC	Water Intertie (EPTDS)	2014/09/23	0.03
57	Town of Fuquay-Varina	NC	Water Intertie (EPTDS)	2014/12/10	0.02
58	Summerville	GA	Summerville Water Plant, (finished water tap)	2015/02/24	0.03
59	Middlesex Water Company	NJ	Park Ave. Treatment (EPTDS)	2013/10/15	0.02926
59	Middlesex Water Company	NJ	Park Ave. Treatment (EPTDS)	2014/04/14	0.02234
59	Middlesex Water Company	NJ	South Tingley Lane (EPTDS)	2013/10/15	0.02859
60	City of Orange	CA	Well 3 (EP#36: EP-O3-01)	2014/05/14	0.0291

No.	PWS	State	Sample Location	Date	Results
60	City of Orange	CA	Well 3 (EP#36: EP-O3-01)	2014/10/13	0.0268
60	City of Orange	CA	Well 15 (EP #40: EP-O15-01)	2014/05/14	0.0261
60	City of Orange	CA	Well 15 (EP #40: EP-O15-01)	2014/10/13	0.0252
60	City of Orange	CA	Well 23 (EP#46: EP-O23-01)	2014/10/14	0.0224
60	City of Orange	CA	Wells 4 & 5 Blend (EP#24: RES-OWATER-01)	2014/10/14	0.021
61	City of Pico Rivera Water Dept.	CA	Well 4 (EP #23: Well 4 Treated)	2014/07/30	0.029
61	City of Pico Rivera Water Dept.	CA	Well 6 (EP #25: Well 6 Treated)	2014/06/04	0.027
61	City of Pico Rivera Water Dept.	CA	Well 12 (EP #20: Well 12 Treated)	2013/01/24	0.021
61	City of Pico Rivera Water Dept.	CA	Well 11 (EP #19: Well 11 Treated)	2013/01/24	0.02
61	City of Pico Rivera Water Dept.	CA	Well 7 (EP #26: Well 7 Treated)	2014/07/30	0.02
62	Atascadero Mutual Water Company	CA	Treatment Bldg. C (EP #53)	2013/10/30	0.028
63	Camp Pendleton (South)	CA	Chlorin. Station 410618 (Eff.)	2014/05/21	0.028
63	Camp Pendleton (South)	CA	Chlorin. Station 410618 (Eff.)	2013/11/13	0.021
64	City of Anaheim	CA	Well 46 (EP #72)	2015/01/06	0.028

No.	PWS	State	Sample Location	Date	Results
64	City of Anaheim	CA	Well 41 (EP #74)	2015/01/06	0.023
64	City of Anaheim	CA	Well 55 (EP#57)	2015/01/07	0.02
65	Cottage Grove	MN	Combined Discharge (EPTDS)	2013/08/28	0.0278
66	Santa Clarita Water Division	CA	Santa Clara Well (EP #52: Treated)	2014/04/09	0.027
67	Ridgewood Water	NJ	Russell (EPTDS)	2015/06/04	0.027
67	Ridgewood Water	NJ	Russell (EPTDS)	2014/06/25	0.025
67	Ridgewood Water	NJ	Lakeview (EPTDS)	2015/06/04	0.024
67	Ridgewood Water	NJ	Stevens (EPTDS)	2014/06/30	0.024
67	Ridgewood Water	NJ	Stevens (EPTDS)	2014/12/29	0.023
67	Ridgewood Water	NJ	Fairview (EPTDS)	2015/06/04	0.022
67	Ridgewood Water	NJ	Carr Treatment Plant (EPTDS)	2014/06/25	0.022
67	Ridgewood Water	NJ	Weisch (EPTDS)	2014/06/30	0.022
67	Ridgewood Water	NJ	Weisch (EPTDS)	2014/12/15	0.02
67	Ridgewood Water	NJ	Meer Treatment House (EPTDS)	2014/12/15	0.026
67	Ridgewood Water	NJ	Meer Treatment House (EPTDS)	2014/06/25	0.024
67	Ridgewood Water	NJ	Prospect (EPTDS)	2014/06/30	0.025
67	Ridgewood Water	NJ	Prospect (EPTDS)	2014/12/17	0.025
67	Ridgewood Water	NJ	Irving (EPTDS)	2014/12/17	0.025
67	Ridgewood Water	NJ	Irving (EPTDS)	2014/06/30	0.024

No.	PWS	State	Sample Location	Date	Results
67	Ridgewood Water	NJ	Glen Rock (EPTDS)	2014/06/30	0.023
67	Ridgewood Water	NJ	Glen Rock (EPTDS)	2014/12/17	0.02
67	Ridgewood Water	NJ	East Ridgewood Treatment Facility (EPTDS)	2014/12/29	0.021
67	Ridgewood Water	NJ	East Ridgewood Treatment Facility (EPTDS)	2014/06/30	0.02
67	Ridgewood Water	NJ	Lafayette (EPTDS)	2014/06/30	0.02
67	Ridgewood Water	NJ	Cedar Hills Wells (EPTDS)	2014/12/29	0.02
67	Ridgewood Water	NJ	Mountain Treatment House (EPTDS)	2014/06/25	0.02
68	Aqua OH - Struthers	OH	Poland Filtration Plant (EPTDS)	2014/10/13	0.027
69	City of Port Lavaca	TX	GBRA Water Intertie (EPTDS)	2014/02/24	0.0264
70	Aqua PA - Bristol	PA	Filter Plant 2 (Edgely Wellfield)	2013/12/20	0.026
70	Aqua PA - Bristol	PA	Filter Plant 2 (Edgely Wellfield)	2014/06/20	0.02
71	Aqua NJ - Blackwood	NJ	Treatment Plant (Well 20)	2014/04/17	0.026
72	City of Norco	CA	MWD Intertie (EPTDS)	2015/02/03	0.026
73	Valencia Water Company	CA	Well N-7 (EP #54: Treated)	2014/10/16	0.026

No.	PWS	State	Sample Location	Date	Results
73	Valencia Water Company	CA	Well S-8 (EP #44: Treated)	2014/10/16	0.024
73	Valencia Water Company	CA	Well N (EP #29: Treated)	2014/05/28	0.024
73	Valencia Water Company	CA	Well S-6 (EP #43: Treated)	2014/03/12	0.024
73	Valencia Water Company	CA	Well S-7 (EP #45: Treated)	2014/03/12	0.023
74	Yorba Linda Water District	CA	Highland Reservoir (EP 12: RES-YLWDHIGHLAND-01)	2013/07/10	0.0259
74	Yorba Linda Water District	CA	Highland Reservoir (EP 12: RES-YLWDHIGHLAND-01)	2013/01/09	0.0241
75	Danvers Water Dept.	MA	Well 1 Treatment Facility (EPTDS)	2013/11/19	0.025
75	Danvers Water Dept.	MA	Well 1 Treatment Facility (EPTDS)	2014/05/21	0.022
76	City of Lathrop	CA	Well 21 (EP #14: Treated)	2013/04/17	0.025
76	City of Lathrop	CA	Well 21 (EP #14: Treated)	2013/10/15	0.02
77	Wright-Patterson AFB Area A/C	OH	Building 10855-STU 1 (EPTDS)	2014/10/07	0.025
78	Point Pleasant Water Dept.	NJ	Bricktown Intertie (MUA)	2013/11/13	0.02455
78	Point Pleasant Water Dept.	NJ	Bricktown Intertie (MUA)	2013/09/16	0.0244
78	Point Pleasant Water Dept.	NJ	Connection (NJEMS 15-201)	2015/06/10	0.02

No.	PWS	State	Sample Location	Date	Results
79	Woodruff Roebuck Water District	SC	Woodruff-Roebuck WTP (1101 Kitchens Rd.)	2014/09/02	0.024
80	Galesburg	IL	Water Treatment Plant (EPTDS)	2013/10/14	0.02338
81	Moore County Public Utilities	NC	EMWD Intertie (EPTDS)	2013/05/16	0.023
82	Hawthorne Water Dept.	NJ	S. Station Tower 1 (Wagaraw Wellfield)	2013/05/22	0.023
82	Hawthorne Water Dept.	NJ	Utter Ave. Treatment (EPTDS)	2013/05/22	0.023
82	Hawthorne Water Dept.	NJ	N. Station Goffle Field (EPTDS)	2013/05/22	0.022
83	Lakewood Township MUA	NJ	BTMUA Intertie (EPTDS)	2014/08/27	0.0225
83	Lakewood Township MUA	NJ	BTMUA Intertie (EPTDS)	2015/02/19	0.0204
84	Washington County Service Authority	VA	BVUB - Exit 14 (EPDS)	2014/05/06	0.0222
85	Wallington Water Dept.	NJ	Passaic Valley Water Comm. (NJEMS 02-050)	2013/11/13	0.022
86	Issaquah Water System	WA	Gillman Well 4 (EPTDS)	2013/07/22	0.0215
86	Issaquah Water System	WA	Gillman Well 4 (EPTDS)	2014/01/08	0.02
87	New Windsor Consolidated Water District	NY	Newburgh City Water Intertie (EPTDS)	2014/12/05	0.0215

No.	PWS	State	Sample Location	Date	Results
88	Chatsworth	GA	Eaton Spring Plant (Finished Water Tap)	2015/06/15	0.02148
89	Hartford County DPW	MD	Perryman WTP (POE)	2013/09/03	0.02123
90	Brookwood Comm. Water System	NC	Well 39 (EPTDS)	2014/02/25	0.021
90	Brookwood Comm. Water System	NC	Well 34 (EPTDS)	2014/02/24	0.02
91	City of Miramar	FL	East Plant (POE)	2014/07/10	0.021
92	Orchard Dale Water District	CA	Mills (EPTDS)	2014/07/21	0.021
93	Gallia County Rural Water Association	OH	Gallia Co. WTP (EPTDS)	2014/09/04	0.02044
94	Consolidated Utility District of Rutherford	TN	E. Fork Stones River Plant (EPTDS)	2013/11/12	0.02
95	Louisville Water Company	KY	BE Payne Water Treatment (plant tap EPTDS)	2013/02/11	0.02
95	Louisville Water Company	KY	Crescent Hill Filter Plant (plant tap EPTDS)	2013/08/12	0.02
96	Florence Water-Wastewater Dept.	AL	Wilson Lake + Treatment Plant	2014/04/16	0.02
97	Albertville Utilities Board	AL	Old Plant (12 MGD)	2015/01/29	0.02
97	Albertville Utilities Board	AL	New Plant (9 MGD)	2015/01/29	0.02

No.	PWS	State	Sample Location	Date	Results
98	Boaz Water & Sewer Board	AL	Albertville Utilities Intertie (EPTDS)	2015/01/27	0.02
99	Clanton Water Department	AL	Clanton Water Treatment Plant	2014/11/24	0.02
100	Harnett County Department of Public Utilities	NC	Clearwell (Effluent)	2014/09/17	0.02
100	Harnett County Department of Public Utilities	NC	Clearwell (Effluent)	2014/12/10	0.02
101	City of Dunn	NC	A.B. Uzzell WTP (EPTDS)	2015/06/17	0.02